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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,238	07/14/2003	Alexandre Bronstein	BRONSTEIN.002	5820

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EXAMINER
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HOEL, MATTHEW D

ART UNIT	PAPER NUMBER
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3713

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/619,238

Applicant(s)

BRONSTEIN, ALEXANDRE

Examiner

Matthew D. Hoel

Art Unit

3713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/20/2003
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

1. 35 U.S.C. 101 reads as follows:
2. Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
3. Claims 1 to 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are drawn to a process that is merely a manipulation of abstract ideas with no practical or physical application of those ideas. There is no practical application that produces a physical transformation or practical application that has a concrete, tangible, and useful result. A psychiatrist or psychologist sitting at a table with a patient, conducting the test with flash cards bearing images to be identified, could conceivably carry out the claims regarding an image recognition capability. The claims regarding a capability to recognize spoken speech, a natural language processing capability, and a common sense reasoning capability could conceivably be carried out by the same psychiatrist or psychologist verbally asking questions of a patient. The examiner notes that the mental step and human step tests are no longer used. See MPEP 2106 and the 35 U.S.C. 101 guidelines (Official Gazette, Nov. 2005).
4. Claims 15 to 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are drawn to nonfunctional descriptive material, namely "a set of information for performing a human test" and "a set of possible questions." These claims should ideally be drawn to computer-

Art Unit: 3713

executable instructions stored on a computer-readable medium for causing a computer to positively execute the steps for performing a human test. The claims as they are written have no concrete, tangible, and useful result. They are merely a pool of questions, which would be better suited to copyright, rather than patent, protection. See MPEP 2106(B)(1)(b). The claims should be drawn to an apparatus for conducting a human test or a method of conducting a human test, as long as the method has a concrete, tangible, and useful result. Quoting from MPEP 2106: "When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. See paragraph IV.B.2(b), below. When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim. See paragraph IV.B.2(a), below." The examiner's preference (not a requirement) is for three sets of parallel, nearly-verbatim claims, one for an apparatus, another for a method or process, and yet another for computer-executable instructions stored on a computer-readable medium for carrying out the method or process.

5. The examiner does not believe that Claims 1 to 20 are nonstatutory simply because they mention a human being. Claim 1 cites receiving an answer and determining if the answer is one that would be given by a human being, as opposed to, say, a computer, but the Claim does not positively cite a human being as part of an apparatus or process. Likewise, Claim 15 cites questions pertaining to human conceptual abilities, but does not positively cite human beings as part of an apparatus or process. See MPEP 2105.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

7. A person shall be entitled to a patent unless –

8. (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1 to 6, 8, 10 to 13, 15 to 17, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Cartmell, et al. (U.S. pre-grant publication 2003/0110400 A1, application 10/016,477).

10. As to Claim 1: Cartmell in '400 teaches a human test, comprising the steps of posing a question that is selected to exercise a human conceptual ability, obtaining the answer to the question, and comparing the answer to a correct answer that would be rendered by a human being (Abst., Para. 18, 27).

11. As to Claim 2: In '400, the step of posing a question comprises the step of posing a question that is selected to exercise and image recognition capability (identifying flower, Para. 27).

12. As to Claim 3: In '400, the step of posing a question comprises the step of posing a question that is selected to exercise a capability to recognize spoken speech (identifying audible word, Para. 27).

13. As to Claim 4: In '400, the step of posing a question comprises the step of posing a question that is selected to exercise a natural language processing capability (identifying sentence error, Para. 27).

14. As to Claim 5: In '400, the step of posing a question comprises the step of posing a question that is selected to exercise a common sense reasoning ability (identifying distorted word, Para. 27).

15. As to Claim 6: In '400, the step of posing a question comprises the step of posing a question that is selected to exercise any combination of image recognition and spoken speech recognition and natural language processing and common sense reasoning capabilities (asking Turing questions of different types, Para. 27).

16. As to Claim 8: In '400, the step of posing a question comprises the step of posing a question using visual communication (web page asking user to identify flower, Para. 27).

17. As to Claim 10: In '400, the step of posing a question comprises the steps of generating a stimulus that is perceptible by one or more human senses, and posing a question pertaining to the stimulus that is selected to exercise the human conceptual ability (identifying flower, Para. 27).

18. As to Claim 11: In '400, the step of generating a stimulus comprises the step of generating an image (web page generating image of flower, Para. 27).

19. As to Claim 12: In '400, the step of generating a stimulus comprises the step of generating a speech communication (asking the user to identify an audible word, Para. 27).

20. As to Claim 13: In '400, the step of generating a stimulus comprises the step of generating a sound (asking the user to identify an audible word, Para. 27).

21. As to Claim 15: '400 has a computer-readable medium that holds a set of information for performing a human test by posing a question that is selected to exercise a human conceptual ability (Abst., Para. 27). It is inherent that authorization server 1030 of Fig. 10 would have a computer-readable medium.

22. As to Claim 16: '400 includes a set of possible questions from which the question may be selected (the system may ask many different questions, Para. 27).

23. As to Claim 17: In '400, an image may pose the question (web page asking user to identify the flower, Para. 27).

24. As to Claim 19: In '400, the information includes an image to which the question pertains (flower to be identified, Para. 27).

25. As to Claim 20: In '400, the information includes a sound to which the question pertains (identifying an audible word, Para. 27).

### ***Claim Rejections - 35 USC § 103***

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

27. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3713

28. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

29. Determining the scope and contents of the prior art.

30. Ascertaining the differences between the prior art and the claims at issue.

31. Resolving the level of ordinary skill in the pertinent art.

32. Considering objective evidence present in the application indicating obviousness or nonobviousness.

33. Claims 7, 9, 14, and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Cartmell ('400) in view of Lillibridge, et al. (U.S. patent 6,195,698 B1).

34. As to Claim 7: Cartmell in '400 discloses all of the elements of Claim 7, but lacks specificity as to posing a question using speech communication. Lillibridge, however, in '698 teaches posing a question using speech communication (Col. 9, Lines 19 to 40). '698 poses a riddle to the user using computer-generated speech. It would be obvious to one of ordinary skill in the art to apply the speech communication of '698 to the authorization system of '400. Fig. 4 of '698 is an example of a Turing question used to prevent automated scripts or programs from accessing websites. '400 uses Turing questions to block access to computer systems in a like manner (Para. 27). '400 asks the user to identify an image, in this case a flower, just like '698 asks the user to identify an image, in this case, distorted letters which would be difficult for a computer to interpret using OCR. The advantage of this combination would be to make the system user-friendlier to visually impaired individuals by posing the question via speech instead of simply via images such as web pages ('698, Col. 9, Line 35).

Art Unit: 3713

35. As to Claim 9: '698 poses a question using a communication that is adapted to a human having an impairment (Col. 9, Lines 29 to 35).

36. As to Claim 14: '698 measures the time taken by the subject of the test to provide the answer (Col. 4, Lines 51 to 59).

37. As to Claim 18: In '698, the information includes a sound that poses the question (audible riddle, Col. 9, Lines 19 to 40).

#### ***Citation of Pertinent Prior Art***

38. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Andrews, et al. in U.S. pre-grant publication 2003/0204569 A1, application 10/135,102, teach a method and apparatus for filtering e-mail. Tyree in U.S. pre-grant publication 2002/0120853 A1, application 09/793,733, teaches denial-of-service attack discrimination using Turing tests. Moni Naor in "Verification of a Human in the Loop or Identification Via the Turing Test" teaches Turing tests for authenticating computer users. Tsz-Yan Chan in "Using a Text-to-Speech Synthesizer to Generate a Reverse Turing Test" teaches Turing tests involving speech generation. von Ahn, et al. in "Captcha: Using Hard AI Problems for Security" teach using image identification for user authentication.

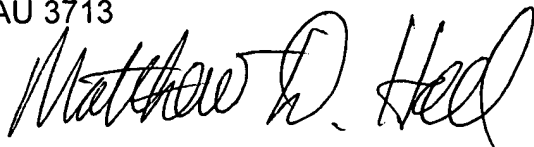
**Conclusion**

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Hoel whose telephone number is (571) 272-5961. The examiner can normally be reached on Mon. to Fri., 8:00 A.M. to 4:30 P.M.

40. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

41. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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TC3700